Supplemental Table 1. Components of MDS and AHEI

	MDS	AHEI
Vegetable		
Fruit	$\checkmark$	$\sqrt{}$
SSB & fruit juice		$\sqrt{}$
Nut	$\sqrt{}$	.1
Legume	$\sqrt{}$	V
Whole grain	$\sqrt{}$	$\sqrt{}$
Fish	$\sqrt{}$	
Red meat	$\sqrt{}$	$\sqrt{}$
MUFA/SAT ratio	$\sqrt{}$	
EPA & DHA		$\sqrt{}$
PUFA		$\sqrt{}$
Trans-fat		$\sqrt{}$
Alcohol	$\sqrt{}$	$\sqrt{}$
Sodium		$\sqrt{}$

MDS: Mediterranean-style dietary score AHEI: Alternative healthy eating index SSB: Sugar sweetened beverages MUFA: Monounsaturated fatty acids

SAT: Saturated fatty acids EPA: eicosapentaenoic acid DHA: Docosahexaenoic acid PUFA: Polyunsaturated fatty acids Supplemental Table 2. Cutoff values used to define incident fatty liver

	Sex-, cohort, and examination-specific 30 <sup>th</sup> percentile							
	2nd Gener	ration cohort	3rd Generation cohort					
	Men	Women	Men	Women				
Baseline	34.3	35.1	34.8	35.1				
Follow-up	31.8	33.9	32.6	34.6				

Supplemental Table 3. Summary of NAFLD related GWAS SNPs

SNP	Chr.	Position	EA	EAF	Effect	Functional Consequence of SNP	Gene	Summary of Gene
rs738409	22	44324727	G	0.23	0.26	missense	PNPLA3	PNPLA3 (Patatin Like Phospholipase Domain Containing 3) is a protein coding gene. Diseases associated with PNPLA3 include Pnpla3-related susceptibility to NAFLD and fatty liver disease. Among its related pathways are Metabolism and Adipogenesis. GO annotations related to this gene include phospholipase A2 activity and mono-olein transacylation activity. An important paralog of this gene is PNPLA2.
rs2228603	19	19329924	T	0.07	0.24	missense	NCAN	NCAN (Neurocan) is a protein coding gene. Among its related pathways are ECM proteoglycans and cell adhesion Cell-matrix glycoconjugates. GO annotations related to this gene include calcium ion binding and extracellular matrix structural constituent. An important paralog of this gene is ACAN.
rs1213785	5 1	219448378	C	0.79	0.08	intron variant	LYPLAL1	LYPLAL1 (Lysophospholipase Like 1) is a protein coding gene. GO annotations related to this gene include hydrolase activity and lysophospholipase activity. An important paralog of this gene is LYPLA2
rs780094	2	27741237	T	0.39	0.06	intron variant	GCKR	GCKR (Glucokinase Regulator) is a protein coding gene. Diseases associated with GCKR include fasting plasma glucose level and Maturity-Onset Diabetes of The Young. Among its related pathways are Transport of the SLBP independent Mature mRNA and Metabolism. GO annotations related to this gene include enzyme binding and protein domain specific binding.
rs4240624	8	9184231	A	0.92	0.29	intron variant	PPP1R3B	PPP1R3B (Protein Phosphatase 1 Regulatory Subunit 3B) is a protein coding gene. Diseases associated with PPP1R3B include Water-Clear Cell Adenoma and Maturity-Onset Diabetes of The Young. Among its related pathways are Insulin resistance and Beta-Adrenergic Signaling. GO annotations related to this gene include enzyme binding and protein phosphatase regulator activity. An important paralog of this gene is PPP1R3C

NAFLD: nonalcoholic fatty liver disease; GWAS: genome-wide association study; SNP: single nucleotide polymorphisms; Chr: Chromosome; Position: build 37; EA: effect allele; EAF: effect allele frequency; Effect: regression coefficients (GOLD consortium GWAS for NAFLD; PLoS Genet 2011;7: e1001324) Gene summary is quoted from the GeneCards®: The Human Gene Database (<a href="http://www.genecards.org/">http://www.genecards.org/</a>; accessed on January 16, 2018); GO: gene ontology

Supplemental Table 4. Intakes of dietary components of the Mediterranean-style dietary score (MDS) according quartile categories of  $\Delta$ MDS

dictary score (WDS)	<u> </u>		ΔΜ	IDS	
		Q1	Q2	Q3	Q4
Median ΔMDS		-4	-1	1	4
			Base	eline	
MDS		15±4	13±4	12±4	11±4
Vegetable	servings/d	$2.8 \pm 1.7$	$2.6\pm1.8$	$2.4 \pm 1.6$	$2.2 \pm 1.5$
Fruit	servings/d	$2.4 \pm 1.4$	$2.2 \pm 1.5$	$2.0\pm1.4$	$1.9 \pm 1.5$
Nut	servings/d	$0.5 \pm 0.5$	$0.4\pm0.6$	$0.3\pm0.6$	$0.3\pm0.4$
Whole grain	servings/d	$1.2 \pm 1.0$	1.1±1.1	$0.9 \pm 1.0$	$0.8\pm0.9$
Legume	servings/d	$0.5\pm0.4$	$0.4\pm0.4$	$0.3\pm0.3$	$0.3\pm0.3$
Fish	servings/d	$0.4\pm0.3$	$0.3\pm0.2$	$0.3\pm0.2$	$0.3\pm0.2$
Red meat	servings/d	$0.8\pm0.6$	$0.8\pm0.5$	$0.8\pm0.6$	$0.8\pm0.6$
MUFA/SAT ratio		$1.1\pm0.2$	$1.1\pm0.2$	$1.0\pm0.2$	$1.0\pm0.2$
Alcohol	g/d	$7.5 \pm 9.7$	8.1±9.5	$7.9 \pm 10.0$	$8.2 \pm 10.7$
			Follo	w-up	
MDS		10±4	12±4	13±4	16±4
Vegetable	servings/d	$2.3 \pm 1.8$	$2.7 \pm 1.7$	$2.9 \pm 1.9$	$3.4\pm2.1$
Fruit	servings/d	$1.6 \pm 1.2$	$2.0\pm1.4$	$1.9 \pm 1.3$	$2.3 \pm 1.4$
Nut	servings/d	$0.5 \pm 0.6$	$0.6\pm0.8$	$0.7 \pm 0.8$	$0.9\pm0.9$
Whole grain	servings/d	$0.9 \pm 1.1$	1.1±0.9	$1.2 \pm 1.1$	1.5±1.1
Legume	servings/d	$0.3\pm0.3$	$0.4\pm0.3$	$0.4\pm0.4$	$0.5\pm0.4$
Fish	servings/d	$0.2\pm0.2$	$0.3\pm0.3$	$0.3\pm0.4$	$0.4\pm0.3$
Red meat	servings/d	$0.9\pm0.6$	$0.8\pm0.6$	$0.7\pm0.5$	$0.7\pm0.5$
MUFA/SAT ratio		$1.1\pm0.2$	$1.1\pm0.3$	$1.2\pm0.3$	$1.3\pm0.4$
Alcohol	g/d	8.1±11.2	9.4±12.2	$8.7\pm 9.8$	9.1±11.1

Values are mean and standard deviation

Supplemental Table 5. Intakes of dietary components of the alternative healthy eating index (AHEI) according quartile categories of  $\Delta$ AHEI

,			ΔΑ	HEI					
		Q1	Q2	Q3	Q4				
Median ΔAHEI		-6	2	9	18				
			Baseline						
AHEI		59±12	56±11	52±11	50±11				
Vegetable	servings/d	$3.3\pm2.0$	3.3±1.9	$3.0 \pm 2.0$	$2.8 \pm 1.7$				
Fruit	servings/d	$1.5 \pm 1.2$	$1.5 \pm 1.2$	$1.2 \pm 0.9$	1.2±0.9				
Nut & legume	servings/d	$0.5 \pm 0.6$	$0.4\pm0.4$	$0.4 \pm 0.5$	$0.3\pm0.4$				
SSB & fruit juice	servings/d	$1.0 \pm 1.1$	1.1±1.2	$1.3 \pm 1.2$	1.3±1.2				
Whole grains	g/day	$25.9 \pm 19.8$	28.1±21.5	$23.4 \pm 18.7$	23.6±17.5				
Red meat	servings/d	$0.8\pm0.6$	$0.9\pm0.7$	$0.9 \pm 0.6$	$1.1 \pm 0.8$				
EPA & DHA	mg/day	291±228	318±318	270±236	272±248				
PUFA	% energy	6.1±1.7	$5.7 \pm 1.4$	$5.6 \pm 1.4$	$5.6 \pm 1.4$				
Trans-fat	% energy	$0.011 \pm 0.004$	$0.012 \pm 0.004$	$0.012 \pm 0.004$	$0.013 \pm 0.004$				
Sodium	mg/day	1973±691	2134±813	2079±755	2224±779				
Alcohol	servings/d	$0.6\pm0.7$	$0.6\pm0.7$	$0.6\pm0.8$	$0.6\pm0.9$				
			Follo	ow-up					
AHEI		52±11	58±11	61±11	69±11				
Vegetable	servings/d	$3.0\pm1.8$	3.1±1.9	$3.3\pm2.3$	$3.6\pm2.0$				
Fruit	servings/d	1.1±0.9	1.3±1.0	$1.4 \pm 1.1$	$1.8 \pm 1.4$				
Nut & legume	servings/d	$0.5 \pm 0.6$	$0.5\pm0.5$	$0.7 \pm 0.6$	$0.9 \pm 1.0$				
SSB & fruit juice	servings/d	1.1±1.2	$1.0 \pm 1.0$	$0.8 \pm 0.8$	$0.6\pm0.8$				
Whole grains	g/day	$32.4\pm24.6$	35.6±23.0	35.1±22.1	40.5±23.5				
Red meat	servings/d	1.1±0.7	$0.9\pm0.6$	$0.9 \pm 0.6$	$0.7 \pm 0.5$				
EPA & DHA	mg/day	291±425	354±341	369±314	437±348				
PUFA	% energy	6.1±1.5	6.2±1.5	6.6±1.6	$7.2 \pm 2.1$				
Trans-fat	% energy	0.011±0.004	0.011±0.003	0.011±0.004	0.010±0.003				
Sodium	mg/day	2246±776	2171±832	2164±776	2112±721				
Alcohol	servings/d	$0.7 \pm 1.0$	$0.6\pm0.7$	$0.6\pm0.8$	$0.5\pm0.6$				

Values are mean and standard deviation

Supplemental Table 6. Association of change in Mediterranean-style dietary score (ΔMDS) and change in BMI and waist circumference

	Q1	Q2	Q3	Q4	per SD increase in	
Median ΔMDS	-4	-1	1	4	ΔMDS	P-trend
BMI, kg/m <sup>2</sup>						
N	357	432	295	437		
Model 1	1.10 (0.78, 1.42)	0.89 (0.59, 1.19)	0.64 (0.29, 0.99)	0.44 (0.13, 0.75)	-0.26 (-0.39, -0.13)	< 0.001
Model 2	1.18 (0.84, 1.52)	0.88 (0.57, 1.20)	0.61 (0.24, 0.97)	0.26 (-0.06, 0.59)	-0.38 (-0.51, -0.24)	< 0.001
Waist circumference, cm						
N	354	426	293	438		
Model 1	4.55 (3.67, 5.43)	3.40 (2.57, 4.22)	3.26 (2.30, 4.23)	2.72 (1.87, 3.57)	-0.71 (-1.09, -0.36)	< 0.001
Model 2	4.86 (3.93, 5.79)	3.45 (2.58, 4.32)	3.19 (2.19, 4.19)	2.28 (1.38, 3.18)	-1.07 (-1.45, -0.69)	< 0.001

Values are adjusted mean and 95% confidence interval; one standard deviation (SD) of ΔMDS is 4

Model 1 adjusted for sex, age, MDS, BMI or waist circumference, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Model 2 adjusted for model 1 covariates and change in smoking status, physical activity, and energy intake

Supplemental Table 7. Association of change in Alternative Healthy Eating Index (ΔAHEI) and change in BMI and waist circumference

	Q1	Q2	Q3	Q4	per SD increase in	
Median ΔAHEI	-6	2	9	18	ΔΑΗΕΙ	P-trend
BMI, kg/m <sup>2</sup>						
N	380	380	381	380		
Model 1	1.26 (0.95, 1.57)	0.87 (0.57, 1.17)	0.61 (0.29, 0.93)	0.21 (-0.11, 0.54)	-0.37 (-0.50, -0.24)	< 0.001
Model 2	1.21 (0.89, 1.54)	0.85 (0.52, 1.17)	0.57 (0.23, 0.90)	0.16 (-0.18, 0.50)	-0.38 (-0.51, -0.25)	< 0.001
Waist circumference, cm						
N	377	378	378	378		
Model 1	4.67 (3.81, 5.52)	3.51 (2.67, 4.35)	3.09 (2.21, 3.98)	2.33 (1.44, 3.23)	-0.89 (-1.27, -0.53)	< 0.001
Model 2	4.64 (3.74, 5.53)	3.53 (2.64, 4.42)	3.01 (2.09, 3.94)	2.15 (1.21, 3.08)	-0.99 (-1.35, -0.64)	< 0.001

Values are adjusted mean and 95% confidence interval; one standard deviation (SD) of  $\Delta$ AHEI is 12

Model 1 adjusted for sex, age, AHEI, BMI or waist circumference, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Model 2 adjusted for model 1 covariates and change in smoking status, physical activity, and energy intake

Supplemental Table 8. Association of change in diet quality and incident fatty liver

	Q1	Q2	Q3	Q4	per SD increase in $\Delta MDS/\Delta AHEI$	P-trend
ΔMDS (median)	-4	1	2	5		
Incident cases	56	47	44	33		
N	250	310	298	234		
Model 1	Ref.	0.60 (0.38, 0.93)	0.60 (0.38, 0.95)	0.50 (0.31, 0.82)	0.76 (0.64, 0.91)	0.003
Model 2	Ref.	0.61 (0.39, 0.96)	0.56 (0.34, 0.90)	0.48 (0.28, 0.82)	0.74 (0.61, 0.90)	0.002
Model 3	Ref.	0.65 (0.41, 1.04)	0.66 (0.40, 1.08)	0.60 (0.35, 1.04)	0.81 (0.67, 0.98)	0.03
ΔΑΗΕΙ (median)	-6	2	9	18		
Incident cases	52	43	51	34		
N	273	273	273	273		
Model 1	Ref.	0.76 (0.49, 1.18)	0.91 (0.58, 1.42)	0.54 (0.32, 0.90)	0.79 (0.66, 0.95)	0.01
Model 2	Ref.	0.74 (0.47, 1.16)	0.92 (0.58, 1.45)	0.52 (0.30, 0.88)	0.79 (0.65, 0.95)	0.02
Model 3	Ref.	0.85 (0.53, 1.35)	1.08 (0.67, 1.74)	0.68 (0.39, 1.17)	0.86 (0.70, 1.04)	0.12

Values are odds ratio and 95% confidence interval; one standard deviation (SD) is 4 for  $\Delta$ MDS and 12 of  $\Delta$ AHEI

Model 1 adjusted for sex, age, Mediterranean-style dietary score (MDS) or Alternative Healthy Eating Index (AHEI), liver-phantom ratio, aspartate aminotransferase (AST)/alanine aminotransferase (ALT) ratio, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Supplemental Table 9. Association between change in components of the Mediterranean-style dietary score (MDS) and change in liverphantom ratio

_	Model 1		Model 2		Model 3	
MDS components	Mean (95%CI)	P-value	Mean (95%CI)	P-value	Mean (95%CI)	P-value
Vegetable	0.27 (-0.03, 0.58)	0.08	0.31 (0.001, 0.62)	0.049	0.18 (-0.12, 0.47)	0.24
Fruit	0.25 (-0.06, 0.56)	0.11	0.26 (-0.06, 0.57)	0.12	0.14 (-0.17, 0.44)	0.38
Combined fruit & vegetable	0.32 (0.02, 0.62)	0.04	0.37 (0.05, 0.70)	0.02	0.21 (-0.10, 0.52)	0.19
Nut	0.38 (0.05, 0.70)	0.02	0.41 (0.09, 0.74)	0.01	0.38 (0.07, 0.69)	0.02
Whole grain	0.28 (-0.05, 0.60)	0.10	0.30 (-0.03, 0.62)	0.07	0.20 (-0.11, 0.51)	0.21
Legume	0.40 (0.09, 0.71)	0.01	0.38 (0.07, 0.69)	0.02	0.22 (-0.08, 0.52)	0.15
Fish	0.23 (-0.07, 0.53)	0.13	0.25 (-0.05, 0.54)	0.10	0.22 (-0.06, 0.50)	0.13
Red meat †	0.49 (0.17, 0.80)	0.003	0.35 (0.02, 0.67)	0.04	0.11 (-0.20, 0.43)	0.48
MUFA/SAT ratio	0.19 (-0.15, 0.52)	0.28	0.12 (-0.21, 0.44)	0.48	0.04 (-0.27, 0.36)	0.78
Alcohol	-0.01 (-0.34, 0.31)	0.94	-0.15 (-0.46, 0.16)	0.35	-0.20 (-0.50, 0.10)	0.19

Values are adjusted mean change of liver-phantom ratio per standard deviation increase for each MDS individual score

Model 1 adjusted for sex, age, individual score, liver-phantom ratio, aspartate aminotransferase (AST)/alanine aminotransferase (ALT) ratio, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Model 2 adjusted for model 1 covariates and baseline BMI and change in smoking status, physical activity, and energy intake

Model 3 adjusted for model 2 covariates and change in BMI

<sup>†</sup> Increased red meat score represents decreased red meat intake

Supplemental Table 10. Association between change in components of the Alternative Healthy Eating Index (AHEI) and change in liverphantom ratio

AHEI –	Model 1		Model 2		Model 3	Model 3	
components	Mean (95%CI)	P-value	Mean (95%CI)	P-value	Mean (95%CI)	P-value	
Vegetable	0.30 (0.00, 0.60)	0.05	0.36 (0.06, 0.67)	0.02	0.24 (-0.05, 0.54)	0.11	
Fruit	0.45 (0.15, 0.75)	0.003	0.50 (0.20, 0.80)	0.001	0.27 (-0.02, 0.57)	0.07	
Combined fruit & vegetable	0.34 (0.06, 0.63)	0.02	0.39 (0.09, 0.68)	0.01	0.27 (-0.01, 0.55)	0.06	
Nut & legume	0.32 (0.02, 0.61)	0.03	0.39 (0.09, 0.69)	0.01	0.29 (0.01, 0.58)	0.04	
SSB & fruit juice	-0.04 (-0.34, 0.26)	0.79	0.03 (-0.26, 0.33)	0.82	-0.03 (-0.31, 0.26)	0.84	
Whole grains	0.22 (-0.09, 0.53)	0.16	0.34 (0.02, 0.66)	0.04	0.22 (-0.10, 0.53)	0.17	
Red meat †	0.53 (0.22, 0.85)	< 0.001	0.37 (0.04, 0.69)	0.03	0.12 (-0.19, 0.44)	0.44	
EPA & DHA	0.33 (0.03, 0.63)	0.03	0.31 (0.02, 0.60)	0.03	0.26 (-0.02, 0.53)	0.07	
PUFA	0.09 (-0.23, 0.41)	0.59	0.12 (-0.19, 0.43)	0.44	0.12 (-0.17, 0.42)	0.42	
Trans-fat †	0.49 (0.14, 0.83)	0.01	0.41 (0.08, 0.75)	0.02	0.22 (-0.10, 0.54)	0.18	
Sodium †	0.39 (0.08, 0.70)	0.01	0.30 (-0.16, 0.76)	0.20	0.24 (-0.20, 0.68)	0.29	
Alcohol	0.14 (-0.17, 0.44)	0.38	-0.04 (-0.34, 0.26)	0.78	-0.04 (-0.32, 0.25)	0.80	

Values are adjusted mean change of liver-phantom ratio per standard deviation increase for each AHEI individual score

Model 1 adjusted for sex, age, individual score, liver-phantom ratio, aspartate aminotransferase (AST)/alanine aminotransferase (ALT) ratio, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

<sup>†</sup> Increased score represents decreased intake

Supplement Table 11. Association of change in Mediterranean-style dietary score (ΔMDS) and change in liver-phantom ratio

		Q1	Q2	Q3	Q4	_	
Med	IDS dian nge	-4 (-103)	-1 (-2 – 0)	2 (1-3)	5 (4 – 14)	per SD increase in ΔMDS	P-trend
	N	308	384	377	284		
Mod	lel 1	-2.20 (-2.95, -1.45)	-1.69 (-2.38, -1.01)	-1.19 (-1.91, -0.48)	-0.64 (-1.42, 0.14)	0.54 (0.23, 0.84)	< 0.001
Mod	lel 2	-2.06 (-2.84, -1.29)	-1.40 (-2.11, -0.68)	-0.92 (-1.66, -0.19)	-0.40 (-1.21, 0.41)	0.57 (0.26, 0.88)	< 0.001
Mod	del 3	-1.76 (-2.50, -1.01)	-1.24 (-1.93, -0.56)	-1.01 (-1.72, -0.30)	-0.63 (-1.41, 0.15)	0.35 (0.05, 0.65)	0.02

Values are adjusted mean and 95% confidence interval; one standard deviation (SD) of ΔMDS is 4

Model 1 adjusted for sex, age, MDS, liver-phantom ratio, aspartate aminotransferase (AST)/alanine aminotransferase (ALT) ratio, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Supplemental Table 12. Association of change in Alternative Healthy Eating Index (ΔAHEI) and change in liver-phantom ratio

	Q1	Q2	Q3	Q4		
ΔΑΗΕΙ Median	-6 (27 1)	2	9	18	per SD increase in	D trand
Range	(-271)	(-1 – 6)	(6 – 13)	(13 – 41)	ΔΑΗΕΙ	P-trend
N	338	338	339	338		
Model 1	-2.35 (-3.07, -1.63)	-1.47 (-2.17, -0.77)	-1.22 (-1.96, -0.48)	-0.70 (145, 0.04)	0.69 (0.39, 0.99)	< 0.001
Model 2	-2.04 (-2.78, -1.30)	-1.16 (-1.89, -0.43)	-1.05 (181, -0.29)	-0.50 (-1.27, 0.27)	0.62 (0.33, 0.92)	< 0.001
Model 3	-1.71 (-2.42, -1.00)	-1.07 (-1.77, -0.37)	-1.09 (-1.82, -0.36)	-0.77 (-1.50, -0.03)	0.40 (0.12, 0.69)	0.005

Values are adjusted mean and 95% confidence interval; one standard deviation of  $\Delta AHEI$  is 10

Model 1 adjusted for sex, age, AHEI, liver-phantom ratio, aspartate aminotransferase (AST)/alanine aminotransferase (ALT) ratio, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Supplement Table 13. Association of change in Mediterranean-style dietary score (ΔMDS) and change in liver-phantom ratio

	Q1	Q2	Q3	Q4	_	
ΔMDS Median Range	-4 (-103)	-1 (-2 – 0)	1 (1 – 2)	4 (3 – 16)	per SD increase in ΔMDS	P-trend
N	354	426	293	438		
Model 1	-2.08 (-2.77, -1.39)	-1.50 (-2.15, -0.85)	-1.00 (-1.76, -0.24)	-0.69 (-1.36, -0.02)	0.56 (0.27, 0.85)	< 0.001
Model 2	-1.77 (-2.49, -1.05)	-1.16 (-1.84, -0.49)	-0.67 (-1.45, 0.10)	-0.40 (-1.10, 0.30)	0.59 (0.29, 0.88)	< 0.001
Model 3	-1.43 (-2.14, -0.73)	-1.09 (-1.74, -0.43)	-0.65 (-1.40, 0.11)	-0.55 (-1.22, 0.13)	0.37 (0.08, 0.66)	0.01

Values are adjusted mean and 95% confidence interval; one standard deviation of ΔMDS is 4

Model 1 adjusted for sex, age, MDS, liver-phantom ratio, aspartate aminotransferase (AST)/alanine aminotransferase (ALT) ratio, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Model 2 adjusted for model 1 covariates and baseline waist circumference and change in smoking status, physical activity, and energy intake Model 3 adjusted for model 2 covariates and change in waist circumference

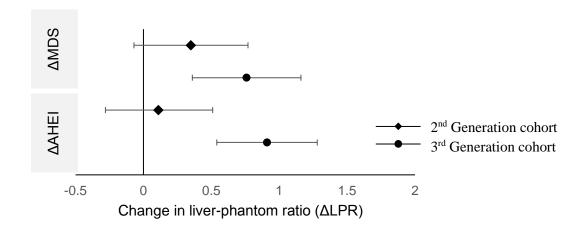
Supplemental Table 14. Association of change in Alternative Healthy Eating Index (ΔAHEI) and change in liver-phantom ratio

	Q1	Q2	Q3	Q4	_	
ΔΑΗΕΙ Median	-6	2	9	18	per SD increase in	
Range	(-271)	(-1 - 6)	(6-13)	(13 - 41)	ΔΑΗΕΙ	P-trend
N	377	378	378	378		
Model 1	-1.98 (-2.65, -1.30)	-1.51 (-2.18, -0.85)	-1.20 (-1.89, -0.50)	-0.50 (-1.21, 0.21)	0.65 (0.36, 0.93)	< 0.001
Model 2	-1.68 (-2.39, -0.97)	-1.18 (-1.88, -0.48)	-0.99 (-1.72, -0.26)	-0.39 (-1.13, 0.35)	0.55 (0.27, 0.82)	< 0.001
Model 3	-1.28 (-1.96, -0.60)	-1.01 (-1.68, -0.34)	-0.93 (-1.63, -0.23)	-0.49 (-1.20, 0.22)	0.35 (0.08, 0.62)	0.01

Values are adjusted mean and 95% confidence interval; one standard deviation of AHEI is 10

Model 1 adjusted for sex, age, AHEI, liver-phantom ratio, aspartate aminotransferase (AST)/alanine aminotransferase (ALT) ratio, energy intake, current smoking, and physical activity level (all covariates in Model 1 are baseline values)

Model 2 adjusted for model 1 covariates and baseline waist circumference and change in smoking status, physical activity, and energy intake Model 3 adjusted for model 2 covariates and change in waist circumference



Supplemental Figure 1. Association between change in Mediterranean-style dietary score ( $\Delta MDS$ ) and Alternative Healthy Eating Index ( $\Delta AHEI$ ) and change in liver-phantom ratio ( $\Delta LPR$ , increased ratio reflects decrease of liver fat) in the second-generation and third-generation sub-cohorts. Values are LPR change (95% confidence interval) for 1-SD increase in  $\Delta MDS$  or  $\Delta AHEI$ . Covariates adjusted for in models are sex, age, and baseline liver-phantom ratio, baseline dietary score (MDS or AHEI), baseline AST/ALT ratio, and baseline smoking status, baseline physical activity level, baseline energy intake, baseline BMI, as well as change in smoking status, physical activity level, and energy intake from baseline to follow-up.